Docket No. RTN-147CUS

Listing of the Claims:

1

This listing of the claims will replace all prior versions, and listings, of the claims in the application:

- (Previously Presented) A method of forming a plurality of two-way beams using a transmit and receive system, the method comprising:
- controlling a transmit antenna array of the transmit and receive system to provide
 a plurality of transmit beams;
- simultaneously forming a first plurality of receive beams via a beamformer
 network;
- 7 controlling a switched beam combining circuit of a receive antenna array of the
 8 transmit and receive system to form a second plurality of receive beams wherein the
 9 controlling comprises combining selected ones of the formed beams via a switch
 10 network; and
- 11 combining predetermined ones of the plurality of transmit beams and 12 predetermined ones of the second plurality of receive beams to form the plurality of two-13 way beams.
- 1 2. (Previously Presented) The method of claim 1, wherein controlling the transmit
- 2 antenna array includes controlling a beam switching system coupled to the transmit
- 3 antenna array to provide the plurality of transmit beams.
- 1 3. (Previously Presented) The method of claim 1, wherein controlling the switched
- 2 beam combining circuit of the receive antenna array includes controlling a plurality of
- 3 single-pole, multi-throw switches to provide the second plurality of receive beams.
- 1 4. (Previously Presented) The method of claim 1, wherein combining includes
- 2 combining a first transmit beam of the plurality of transmit beams with at least one of the

Appl. No. 10/619,020 Docket No. RTN-147CUS Reply to Office Action dated March 27, 2006

3 second plurality of receive beams to provide a first one of the plurality of two-way

- 4 beams
- 1 5. (Previously Presented) The method of claim 4, wherein combining further includes
- 2 combining the first transmit beam of the plurality of transmit beams with a second
- 3 receive beam of the plurality of receive beams to provide a second one of the plurality of
- 4 two-way beams.
- 1 6. (Previously Presented) The method of claim 5, wherein combining further includes
- 2 combining a second transmit beam of the plurality of transmit beams with the second
- 3 receive beam of the plurality of receive beams to provide a third two-way beam of the
- 4 plurality of two-way beams.
- 1 7. (Previously Presented) The method of claim 6, wherein combining further includes
- 2 combining the second transmit beam of the plurality of transmit beams with a third
- 3 receive beam of the plurality of receive beams to provide a fourth two-way beam of the
- 4 plurality of two-way beams.
- 1 8. (Previously Presented) The method of claim 7, wherein combining further includes
- 2 combining the second transmit beam of the plurality of transmit beams with a fourth
- 3 receive beam of the plurality of receive beams to provide a fifth two-way beam of the
- 4 plurality of two-way beams.
- 1 9. (Previously Presented) The method of claim 8, wherein combining further includes
- 2 combining a third transmit beam of the plurality of transmit beams with the fourth
- 3 receive beam of the plurality of receive beams to provide a sixth two-way beam of the
- 4 plurality of two-way beams.
- 1 10. (Previously Presented) The method of claim 9, wherein combining further includes

- 2 combining the third transmit beam of the plurality of transmit beams with a fifth receive
- 3 beam of the plurality of receive beams to provide a seventh two-way beam of the
- 4 plurality of two-way beams.
- 1 11. (Previously Presented) The method of claim 10, wherein combining further
- 2 includes combining the third transmit beam of the plurality of transmit beams with a sixth
- 3 receive beam of the plurality of receive beams to provide an eighth two-way beam of the
- 4 plurality of two-way beams.
- 1 12. (Previously Presented) The method of claim 11, wherein combining further
- 2 includes combining a fourth transmit beam of the plurality of transmit beams with the
- 3 sixth receive beam of the plurality of receive beams to provide a ninth two-way beam of
- 4 the plurality of two-way beams.
- 1 13. (Previously Presented) The method of claim 12, wherein combining further
- 2 includes combining the fourth transmit beam of the plurality of transmit beams with a
- 3 seventh receive beam of the plurality of receive beams to provide a tenth two-way beam
- 4 of the plurality of two-way beams.
- 1 14. (Previously Presented) The method of claim 4, wherein combining further includes
- 2 combining a second transmit beam of the plurality of transmit beams with the first
- 3 receive beam of the plurality of receive beams to provide a second two-way beam of
- 4 the plurality of two-way beams.
- 1 15. (Previously Presented) The method of claim 14, wherein combining further
- 2 includes combining the second transmit beam of the plurality of transmit beams with a
- 3 second receive beam of the plurality of receive beams to provide a third two-way
- 4 beam of the plurality of two-way beams.

Docket No. RTN-147CUS

Appl. No. 10/619,020 Reply to Office Action dated March 27, 2006

- 1 16. (Previously Presented) The method of claim 15, wherein combining further
- 2 includes combining a third transmit beam of the plurality of transmit beams with the
- 3 second receive beam of the plurality of receive beams to provide a fourth two-way
- 4 beam of the plurality of two-way beams.
- 1 17. (Previously Presented) The method of claim 16, wherein combining further
- 2 includes combining the third transmit beam of the plurality of transmit beams with a
- 3 third receive beam of the plurality of receive beams to provide a fifth two-way beam of
- 4 the plurality of two-way beams.
- 1 18. (Previously Presented) The method of claim 17, wherein combining further
- 2 includes combining a fourth transmit beam of the plurality of transmit beams with the
- 3 third receive beam of the plurality of receive beams to provide a sixth two-way beam
- 4 of the plurality of two-way beams.
- 1 19. (Previously Presented) The method of claim 18, wherein combining further
- 2 includes combining the fourth transmit beam of the plurality of transmit beams with a
- 3 fourth receive beam of the plurality of receive beams to provide a seventh two-way
- 4 beam of the plurality of two-way beams.
 - 20. (Cancelled).